



## SUBJECT DATASHEET

<b>Semester:</b>	2011/12/1
<b>Subject:</b>	Life-Cycles Assessment
<b>Code:</b>	VEMKKVM422E
<b>Responsible department:</b>	Department of Environmental Engineering
<b>Responsible department code:</b>	MKKV
<b>Responsible lecturer:</b>	dr. Endre Domokos

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### Educational objectives:

To make students to be able to organize a life cycle assessment on their own.  
By time they have absolved this subject, they will have the ability to do complete life cycle assessments on their own.

### Detailed content of the subject:

1. Basic definitions of EcoDesign.
2. Eco-design means the continuous observation of environmental elements and processes during the planning phase. As a result of it the effects of a product decrease during its whole lifetime.
3. To take into consideration the complete life cycle of products we may find economical and environmental developing possibilities including the manufacturing and usage phase as well the utilization at the end of the life cycle, energy effectiveness, toxic and forbidden components, reusage of products or product-components.
4. During the seminar students will work in smaller groups, where they will work on a plan that is suitable for their field of interest. They use their previously obtained engineering knowledge.

### Requirements:

One written test and an essay in connection with a part of life cycle assessment (stock-taking). Test: 70%.  
Essay: 30%.

### Required and suggested references:

Wolfgang Wimmer - Rainer Züst: ECODESIGN Pilot: Product-Investigation-, Learning- and Optimization-Tool for Sustainable Product Development, Kluwer, 2003, (ISBN 1-4020-1090-7)  
Alastari Fuad-Luke: Ecodesign - The Sourcebook, Chronicle Books, 2002, (ISBN 0-8118-3548-0)  
Wimmer, Wolfgang, Züst, Rainer, Lee, Kun-Mo: ECODESIGN Implementation, Springer, 2004, (ISBN 1-4020-3070-3)